

## Abstract

In an optical system, first and second optical paths intersected with each other on a sample holder are set, wherein the first and second optical paths are formed so that light from a light source is projected to be converged on the intersection from an incoming side beam switching mirror that selectively switches a direction of the light via one of first and second converged light reflectors, first and second received light reflectors that projects the light to an exiting side beam switching mirror disposed on the first and second optical paths respectively, the exiting side beam switching mirror switches a direction of the light projected from one of the first and second received light reflectors, and intensity of light from the sample in case of face side incidence and back side incidence to the sample can be measured.